

## **Wicking Bed Cultivation System as a Strategic Proposal for the Cultivation of Milpa and Mexican Medicinal Plants in Urban Spaces**

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**Abstract :** The proposal posed in this work comes from a researching-action approach. In Mexico, a dialogue of knowledge may function as a link between traditional, local, pragmatic knowledge, and technological, scientific knowledge. The advantage of generating this nexus lies on the positive impact in the environment, in society and economy. This work attempts to combine, on the one hand the traditional Mexican knowledge such as the usage of medicinal herb and the agroecosystem milpa; and on the other hand make use of a newly created agricultural ecotechnology which main function is to take advantage of the urban space and to save water. This ecotechnology is the wicking bed. In a globalized world, is relevant to have a proposal where the most important aspect is to revalorize the culture through the acquisition of traditional knowledge but at the same time adapting them to the new social and urbanized structures without threatening the environment. The methodology used in this work comes from a researching-action approach combined with a practical dimension where an experimental model made of three wickingbeds was implemented. In this model, there were cultivated medicinal herb and milpa components. The water efficiency and the social acceptance were compared with a traditional ground crop, all this practice was made in an urban social context. The implementation of agricultural ecotechnology has had great social acceptance as its irrigation involves minimal effort and it is economically feasible for low-income people. The wicking bed system raised in this project is attainable to be implemented in schools, urban and peri-urban environments, homemade gardens and public areas. The proposal managed to carry out an innovative and sustainable knowledge-based traditional Mexican agricultural technology, allowing regain Milpa agroecosystem in urban environments to strengthen food security in favour of nutritional and protein benefits for the Mexican fare.

**Keywords :** milpa, traditional medicine, urban agriculture, wicking bed

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